Diagnosis and Treatment of Vascular Disease

ABSTRACT

The present invention is based at least in part on the discovery of polymorphisms within the integrin beta 3 (ITGB3), von Willebrand factor (VWF), endothelin receptor type B (EDNRB), factor 2 (F2), P-selectin (SELP), thrombospondin 1 (THBS1), and thrombospondin 2 (THBS2) genes. Accordingly, the invention provides nucleic acid molecules having a nucleotide sequence of an allelic variant of a ITGB3, VWF, EDNRB, F2, SELP, THBS1, or THBS2 gene. The invention also provides methods for identifying specific alleles of polymorphic regions of a ITGB3, VWF, EDNRB, F2, SELP, THBS1, or THBS2 gene, methods for determining whether a subject has or is at risk of developing a disease which is associated with a specific allele of a polymorphic region of a ITGB3, VWF, EDNRB, F2, SELP, THBS1, or THBS2 gene, *e.g.*, a vascular disease, based on detection of polymorphisms within the ITGB3, VWF, EDNRB, F2, SELP, THBS1, or THBS2 gene, and kits for performing such methods. The invention further provides methods for identifying a subject who has, or is at risk for developing, a vascular disease or disorder as a candidate for a particular clinical course of therapy or a particular diagnostic evaluation. The invention further provides methods for selecting a clinical course of therapy or a diagnostic evaluation to treat a subject who is at risk for developing, a vascular disease or disorder.